



East Dakota Water Development District
132B Airport Drive
Brookings, SD 57006

605-688-6741

605-688-6744 Fax

MINUTES
December 20, 2018

The Board of Directors of the East Dakota Water Development District (District) held a regular meeting on December 20th, 2018, at the EDWDD Office, 132B Airport Drive, Brookings. Chairman Jarrett called the meeting to order at 1:05 p.m. The following persons attended:

Directors Present

Mark Anderson
Mary Ellen Connelly
Gary Duffy
Martin Jarrett
Dana Loseke
John Moes
Janelle Weatherly

Directors Absent

Kay Kassube
Director Area 9 (vacant)

Others Present

Jeff Barth, Minnehaha County Commission
Jeremiah Bergstrom, SDSU School of Design
Don Burger, SDSU School of Design
Pat Crawford, SDSU School of Design
Jerry Doyle, Moody County Commission
Roger Hageman, Lake County Commission
Curt Holland, City of Badger
Mitch Kannenberg, WSP
Representative Tim Reed, Legislative District 7
Elizabeth Tofte, SDSU School of Design

Staff Present

Barry Berg
Kevin Christenson
Tanner Clausen
Jay Gilbertson
Jeremy Hinke
Deb Springman

Administrative Items

Approval of Agenda - The Manager asked to have two Project Assistance Requests added to the Agenda, from the United States Geological Survey (USGS) Dakota Water Science Center and the South Dakota State University (SDSU) School of Design. Fees and Expenses policy added to the agenda.

Motion by Duffy, seconded by Weatherly to approve the agenda as so amended. Motion carried unanimously.

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Minutes - The Board reviewed the Minutes of the November 16th, 2018, meeting.

Motion by Loseke, seconded by Anderson to approve the Minutes as presented. Motion carried unanimously.

Financial Reports - The Board reviewed the November 2018 Financial Report.

Motion by Loseke, seconded by Moes to accept the November 2018 Financial Report. Motion carried unanimously. Chairman Jarrett then asked that the report be placed in the District files.

Report of Meetings and Conferences - Directors Anderson, Duffy, Loseke and Weatherly attended the Big Sioux River Water Summit in Sioux Falls on December 6th.

Director Duffy attended the Dakota Rural Action CAFO Information Forum in Mitchell on November 30th.

Director Loseke attended a meeting on updates to the Total Maximum Daily Loads (TMDLs) for the Big Sioux River on November 20th and a Soil Health Forum on November 29th. Both meetings were in Sioux Falls.

Director Moes attended the Lake Pelican Water Project District meeting in Watertown on December 19th.

Director Weatherly attended the Big Sioux River Watershed Project Steering Committee meeting in Sioux Falls on December 6th.

The Manager commented briefly on the following meetings he attended:

1. November 17th - Watertown. Healing the Earth Water Seminar.
2. November 26th - Sioux Falls. Big Sioux River TMDLs update.
3. November 30th - Mitchell. DRA CAFO Information Forum.
4. December 5th - teleconference. SD Water Management Board.
5. December 5th - Brookings. Brookings County Conservation District Board of Supervisors.
6. December 6th - Sioux Falls. Big Sioux River watershed Implementation Project Steering Committee.
7. December 6th - Sioux Falls. Big Sioux River water Summit.
8. December 10th - Pierre. South Dakota Non-Point Source Task Force.
9. December 11th - Sioux Falls. Ag United for South Dakota Annual Luncheon.
10. December 11th - Watertown. Lake Kampeska Master Plan Open House.
11. December 13th - Yankton. SD Game, Fish & Parks Department Invasive Mussels Workshop.
12. December 19th - Centerville. Vermillion Basin Water Development District Board of Directors.

Upcoming Meetings -

1. **January 3rd, 2019 - 1:00 p.m.** - various Dakota Digital Network (DDN) sites. South Dakota Board of Water & Natural Resources.
2. **January 7th - 1:00 p.m.** - USDA Office, Hayti. Hamlin County Conservation District Board of Supervisors.

- 3. January 7th - 6:00 p.m. (MST) - Rapid City.** West Dakota Water Development District Board of Directors meeting.
- 4. January 8th - 10th - Ramkota Hotel & Convention Center, Pierre.** South Dakota Association of Rural Water Systems Annual Technical Conference.
- 5. January 9th - 7:30 a.m. - President's Lobby & Speaker's Lobby, State Capitol, Pierre.** Breakfast with the Water Development Districts legislative event.
- 6. January 9th - 10:00 a.m. - American Legion Cabin, 520 South Pierre Street, Pierre.** James River Water Development District Board of Directors meeting.
- 7. January 9th - 1:00 p.m. - American Legion Cabin, 520 South Pierre Street, Pierre.** January EDWDD Board of Directors meeting.

Payment Requests - The Manager presented the Board with several payment requests from District-sponsored activities that required Board action. He noted that the requests were in order and consistent with the conditions established by the Board at the time of the awards.

<u>Grant Recipient/Activity</u>	<u>Requested Amount</u>
SDSU/Nitrate Removal in Bioreactors of Agricultural Residue (Hua)	\$ 162.39
US Geological Survey/2018 real-time nitrate monitoring	\$ 3,250.00
SDSM&T/Water quality data trend analysis (Kunza)	\$ 587.08
City of Lake Preston/Drinking water system facility plan	\$ 3,600.00
City of Brookings/Dakota Nature Center I&E activities	\$ 1,302.28
City of Brookings/Dakota Nature Center I&E activities	\$ 1,670.65
Total	\$ 10,572.40

Motion by Connelly, seconded by Duffy to authorize payments totaling \$ 10,572.40 as requested. Motion carried unanimously.

Project Assistance Review - The Manager reviewed the status of several projects that had previously received District cost-share assistance. Each project has been completed and will not be requesting further funds, or it has been determined that the project will not proceed. The Manager asked that the Board rescind the balance of District funds (\$39,964 in total) previously committed to the following projects:

<u>Award Date</u>	<u>Project</u>	<u>Award Amount</u>	<u>Unused Balance</u>
Apr 2012	EDWDD WREP Riparian Project	\$49,910	\$ 7,242
Apr 2017	Agricultural Water Testing Project	\$2,500	\$ 2,500
Apr 2017	Big Sioux River Flood Model	\$100,000	\$ 21,475
Oct 2017	City of Lake Norden Raw Water Source	\$4,300	\$ 4,300
May 2018	SDSU SE Research Farm Nitrate Meters	\$9,000	\$ 4,447
	Total		\$ 39,964

Motion by Loseke, seconded by Weatherly to rescind the unused balances of the District cost-share assistance grants (\$39,964) as requested. Motion carried unanimously.

Pending Director Vacancies - The Manager noted that nominating petitions for the current (Area 9) and pending (Area 3) director vacancies are due at the District Office by 5:00 p.m. on January 4th, 2019. Given that the January 2019 Board meeting will be held in Pierre, he suggested that if more than one valid petition is submitted for either position, that the Board defer action on filling the vacancy until the February 21st Board meeting, which will be held in Brookings. By doing so, the Board would not be asking potential candidates to travel to Pierre to meet with the Board. If only one petition is filed, then Board action could be taken at the January meeting.

Motion by Weatherly, seconded by Connelly to defer action on filling either the Area 3 or Area 9 vacancies until February 2019 if multiple valid nominating petitions are filed. Action on filling of such vacancies would be handle at the February 21st Board meeting in Brookings. Motion carried unanimously.

Project Assistance Requests

Town of Badger Wastewater Facility Plan - Curt Holland, Town of Badger, presented a request on behalf of his community for District cost-share assistance to complete a facility plan of their waste water collection and treatment system. The Town has entered into an agreement with Banner Engineering to complete the work, at a projected total cost of \$29,900. A Small Communities Planning Grant from the South Dakota Department of Environment and Natural Resources (DENR) has been requested for \$10,000. Their request is for fifty percent of the balance of the costs (\$19,900), which would be \$9,950.

Motion by Duffy, seconded by Anderson to provide District cost-share assistance to the Town of Badger covering fifty percent (50%) of the local costs of the proposed study, up to a maximum of \$9,950. Motion carried unanimously.

United States Geological Survey - The Manager presented a request for District cost-share assistance from the United States Geological Survey South Dakota Water Science Center (USGS) for support of a real-time nitrate monitoring device on the Big Sioux River. He noted that since May 2014, the District has partnered with the City of Sioux Falls and USGS to operate a real-time monitoring station for nitrates in the Big Sioux River. The device is currently located at the USGS gaging stations near Dell Rapids and is operational from late April to early October. Results are available on-line during the monitoring period.

The joint funding agreement for calendar year 2019 calls for District a contribution of \$3,250, to be matched by \$1,625 from the USGS. A similar agreement has been executed between the City of Sioux Falls and the USGS.

Motion by Loseke, seconded by Connelly to allocate up to \$3,250 in District cost-share support in support of the 2019 operational costs for real-time nitrate monitoring on the Big Sioux River as proposed, and to authorize the Manager to execute a joint funding agreement with the USGS for such purpose. Motion carried unanimously.

South Dakota State University School of Design - Dr. Pat Crawford and Jeremiah Bergstrom, with the South Dakota State University (SDSU) School of Design, presented the Board with a request for cost-share assistance. The funds would be used to support a project entitled, "On Beyond Q: Evaluating MS4

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Stormwater Management Strategies in Built-Out Neighborhoods.” The project would identify appropriate policies and strategies for small rural cities, i.e., those subject to subject to US EPA Stormwater Phase II Rules for Small Municipal Separate Storm Sewer Systems (MS4) requirements, to implement green stormwater infrastructure (GSI) practices into the landscape of existing built-out neighborhoods, including historic districts. It is intended to address water quality compliance with US EPA Small MS4s.

They note that the core problem to be addressed is water quality impacted by insufficient infrastructure coupled with extreme weather events in rural cities’ built-out traditional neighborhoods. The context is two-fold. First is the national trend of rural to urban migration, and second is the increased occurrence of extreme rain events associated with climate change. The approach to change is to use comparative data on stormwater movement using a) the traditional paradigm of “get the water offsite as fast as possible” (finding Q) and b) the potential impacts of green stormwater infrastructure (GSI) practices on water quality and decreasing the impacts of extreme storm events.

The project would involve students in School of Design classes, who would use the City of Brookings as a model for plan development. The end product would include a list of locally-acceptable storm water management activities, along with site-specific recommendations within the community.

The total project cost is \$57,977. SDSU will provide \$39,760 of in-kind support, with \$10,000 to come from a National CLASS Grant. That leaves a balance of \$8,217, and the applicants have requested all or some portion of this amount from the District.

Motion by Weatherly, seconded by Loseke to provide up to \$8,250 in District cost-share assistance to the effort.

Substitute Motion by Duffy, seconded by Moes to defer action on the request until the January 9th, 2019, Board meeting to allow the Manager sufficient time to examine and review the full request. The applicants stated that they understood the interest and need to allow time for further consideration, and thanked the Board for the opportunity to make the presentation (without having to travel to Pierre in January). Substitute Motion carried unanimously.

2019 Legislative Session Preview

State Representative Tim Reed (R-Brookings) provided an overview of expected water resource and other issues likely to arise during the 2019 Session of the South Dakota Legislature, which will begin on January 8th, 2019. The session will open with Governor Kristi Noem giving the State of the State address, and culminate on March 29th.

Nitrate Vulnerability Assessment of Big Sioux Aquifer Well Fields

Mitch Kannenberg, Supervising Engineer for the Sioux Falls Office of WSP USA, Inc., presented a proposal for Phase 1 of a multi-phase nitrate vulnerability assessment of selected Big Sioux Aquifer well fields. The long-range goal of the overall investigation is to provide information regarding the vulnerability of public water supply (PWS) well fields constructed in the Big Sioux aquifer to water quality impacts caused by potentially rising nitrate concentrations in the Big Sioux River. The

investigation will focus on the raw water budgets for the well fields of Big Sioux Community Water System at Egan, Minnehaha Community Water Corporation well field near Dell Rapids, and the Joint Well Field north of Bruce, operated by Brookings-Deuel and Kingbrook Rural Water Systems.

Phase 1 (Water Quality Data Compilation and Relative Concentrations Analysis) would look to initially estimate the percentage of water produced by induced surface water inflow at a well field by examining the ratio of specific water quality parameters that are present in quantifiable concentrations in both the river and in the groundwater. This would require identifying what parameters, natural or anthropogenic, are present in both the river and in the groundwater, and would also require that the surface water quality and groundwater quality data be synoptic (have been collected at or very nearly at the same time). This would include trying to locate water quality data associated with the spring 2010 flood event. WSP would issue a technical memorandum including the tabulated water quality data and an opinion on whether the data quantity and quality are suitable for estimating, utilizing this “tracer” approach, the percentage of surface water inflow at each well field.

The estimated cost of the Phase 1 investigation is \$15,000, although Mr. Kannenberg noted that it might be less, depending on the accessibility of necessary data. District and PWS staff will provide assistance as necessary. He estimated it would take 4 to 6 months to complete the effort. The Manager suggested that it would be appropriate to fund this effort using the WHPA Assistance Program funds set aside specifically for wellhead protection activities, rather than draw from general assistance funds.

Motion by Moes, seconded by Duffy to allocate up to \$15,000 in District WHPA Assistance Program funds toward the proposed Phase 1 investigation, and to authorize the Chairman to execute necessary agreements. The Motion carried unanimously.

Big Sioux River Watershed Implementation Project Update

Barry Berg, Project Coordinator for the Big Sioux River Watershed Implementation Project, provided the Board with an update on the Project. The Project is currently in the third phase (segment) of watershed restoration and protection activities, encompassing the South Dakota portion of the Big Sioux River basin between the Brookings/Hamlin County line and the confluence with the Missouri River at Sioux City. Although District employees, Barry and Tanner Clausen are based in the US Department of Agriculture Service Center in Sioux Falls, under an agreement with the USDA Natural Resources Conservation Service. The Project is sponsored by the Moody Conservation District, with whom the District has an agreement to provide Project staff and support. Barry has been involved with watershed-scale activities in the basin since 1999, when he was hired to conduct the livestock inventory portion of the District-sponsored Central Big Sioux River Watershed Assessment Study. Tanner was hired to work with the District/Project this past March.

Adjournment

There being no further District business, Chairman Jarrett declared the meeting adjourned at 4:27 p.m.

John Moes, Secretary